

CLAIMS

WHAT IS CLAIMED IS:

- 5 1. An isolated polypeptide having at least 80% amino acid sequence identity to an amino acid sequence selected from of any one of SEQ ID NOS. **2 to 13**.
2. An isolated polypeptide having at least 80% amino acid sequence identity to an amino acid
10 sequence selected from of any one of SEQ ID NOS. **14, 15, and 16**.
3. A chimeric molecule comprising a polypeptide of claim **1** fused to a heterologous amino acid sequence.
- 15 4. A chimeric molecule comprising a polypeptide of claim **2** fused to a heterologous amino acid sequence.
5. A recombinant DNA molecule encoding the amino acid sequence of claims **1, 2, 3 or 4**.
- 20 6. A vector comprising the nucleic acid of any one of the DNA molecules of claim **4**.
7. A host cell comprising the vector of claim **6**, wherein said host cell is of bacteria, yeast, insect or mammalian origin.
- 25 8. A method of generating antibodies for Gas6, said method comprising immunization with a polypeptide of claims **1, 2, 3 or 4**.
9. A method of generating antibodies for Gas6, said method comprising immunization with a recombinant DNA vector of claim **6**.
- 30 10. A method of generating antibodies for Gas6, said method comprising screening recombinant antibodies with a polypeptide of claims **1, 2 , 3 or 4**.
11. An antibody or antigen binding fragment thereof capable of binding to an amino acid sequence
35 according to any of claims **1, 2, 3 or 4**.

12. The antibody of claim **11**, wherein said antibody is a polyclonal antibody.
13. The antibody of claim **11**, wherein said antibody is a monoclonal antibody, a humanized antibody
5 or a single chain antibody.
14. A labeled antibody wherein the antibody is the antibody of claims **11** or **12**.
15. An antibody immobilized on an insoluble matrix wherein the antibody is the antibody of claims
10 **11** or **12**.
16. A composition comprising the antibody of claims **11** and **12** and an acceptable carrier.
17. A composition comprising the polypeptide of claims **1, 2, 3 or 4** and an acceptable carrier.
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18. A method of detecting Gas6 polypeptide in a sample suspected of containing Gas6, said method
comprising using antibodies of claims **11** or **12**.
19. The method according to claim **18**, wherein said sample comprises cells suspected of expressing
20 Gas6 polypeptide.
20. A method of prevention or treatment of cardiovascular or other disease resulting from a
dysfunction in a mammal in need of such prevention, said method comprising the use of a
composition of claims **16** or **17**.
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21. At least one isolated mammalian GAS-6 antibody, comprising at least one variable region
comprising at least one heavy chain of SEQ ID No. 26 and at least one light chain of SEQ ID
NOS 28.
- 30 22. At least one isolated mammalian GAS-6 antibody, comprising either (i) at least two of the heavy
chain complementarity determining regions (CDR) amino acid sequences of at least one of SEQ
ID NOS:29-31; or (ii) at least two of the light chain CDR amino acids sequences of at least one of
SEQ ID NOS:32-34.
- 35 23. At least one isolated mammalian GAS-6 antibody, comprising at least one heavy chain or light
chain CDR having the amino acid sequence of at least one of SEQ ID NOS: 29-31 and 32-34.

24. At least one isolated mammalian GAS-6 antibody that binds to the same region of a GAS-6 polypeptide as an antibody comprising at least one heavy chain or light chain CDR having the amino acid sequence of at least one of SEQ ID NOS: 29, 30, 31, 32, 33 or 34.
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25. A GAS-6 antibody according to any of claims 21-24, wherein said antibody binds GAS-6 with an affinity of at least one selected from at least 10^{-9} M, at least 10^{-10} M, at least 10^{-11} M, or at least 10^{-12} M.
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26. An GAS-6 antibody according to to any of claims 21-24, wherein said antibody substantially modulates at least one activity of at least one GAS-6 polypeptide.
27. An isolated nucleic acid encoding at least one isolated mammalian GAS-6 antibody according to any of claims 21-24 and having at least one human CDR of SEQ ID NOS:29-34.
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28. An isolated nucleic acid vector comprising an isolated nucleic acid according to claim 27.
29. A prokaryotic or eukaryotic host cell comprising an isolated nucleic acid according to claim 27.
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30. A host cell according to claim 29, wherein said host cell is at least one selected from COS-1, COS-7, HEK293, BHK21, CHO, BSC-1, Hep G2, 653, SP2/0, 293, HeLa, myeloma, or lymphoma cells, or any derivative, immortalized or transformed cell thereof.
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31. A method for producing at least one GAS-6 antibody, comprising translating a nucleic acid according to claim 27 under conditions in vitro, in vivo or in situ, such that the GAS-6 antibody is expressed in detectable or recoverable amounts.
32. A composition comprising at least one isolated mammalian GAS-6 antibody according to any of claims 21-24 in association with a pharmaceutically acceptable carrier.
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